

PATENT COOPERATION TREATY

From the
INTERNATIONAL SEARCHING AUTHORITY

To:

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REC'D 02 MAY 2005

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WRITTEN OPINION OF THE INTERNATIONAL SEARCHING AUTHORITY (PCT Rule 43bis.1)

Date of mailing
(day/month/year) see form PCT/ISA/210 (second sheet)

Applicant's or agent's file reference
see form PCT/ISA/220

FOR FURTHER ACTION
See paragraph 2 below

International application No.
PCT/EP2005/000703

International filing date (day/month/year)
25.01.2005

Priority date (day/month/year)
28.01.2004

International Patent Classification (IPC) or both national classification and IPC
H01R12/20, H01R24/04

Applicant
MOLEX INCORPORATED

1. This opinion contains indications relating to the following items:

- ☒ Box No. I Basis of the opinion
- ☐ Box No. II Priority
- ☐ Box No. III Non-establishment of opinion with regard to novelty, inventive step and industrial applicability
- ☐ Box No. IV Lack of unity of invention
- ☒ Box No. V Reasoned statement under Rule 43bis.1(a)(i) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement
- ☐ Box No. VI Certain documents cited
- ☐ Box No. VII Certain defects in the international application
- ☐ Box No. VIII Certain observations on the international application

2. FURTHER ACTION

If a demand for international preliminary examination is made, this opinion will usually be considered to be a written opinion of the International Preliminary Examining Authority ("IPEA"). However, this does not apply where the applicant chooses an Authority other than this one to be the IPEA and the chosen IPEA has notified the International Bureau under Rule 66.1bis(b) that written opinions of this International Searching Authority will not be so considered.

If this opinion is, as provided above, considered to be a written opinion of the IPEA, the applicant is invited to submit to the IPEA a written reply together, where appropriate, with amendments, before the expiration of three months from the date of mailing of Form PCT/ISA/220 or before the expiration of 22 months from the priority date, whichever expires later.

For further options, see Form PCT/ISA/220.

3. For further details, see notes to Form PCT/ISA/220.

Name and mailing address of the ISA:



European Patent Office - P.B. 5818 Patentlaan 2
NL-2280 HV Rijswijk - Pays Bas
Tel. +31 70 340 - 2040 Tx: 31 651 epo nl
Fax: +31 70 340 - 3016

Authorized Officer

Jiménez, J

Telephone No. +31 70 340-2871



**WRITTEN OPINION OF THE
INTERNATIONAL SEARCHING AUTHORITY**

International application No.
PCT/EP2005/000703

Box No. I Basis of the opinion

1. With regard to the **language**, this opinion has been established on the basis of the international application in the language in which it was filed, unless otherwise indicated under this item.
☐ This opinion has been established on the basis of a translation from the original language into the following language , which is the language of a translation furnished for the purposes of international search (under Rules 12.3 and 23.1(b)).
2. With regard to any **nucleotide and/or amino acid sequence** disclosed in the international application and necessary to the claimed invention, this opinion has been established on the basis of:
 - a. type of material:
☐ a sequence listing
☐ table(s) related to the sequence listing
 - b. format of material:
☐ in written format
☐ in computer readable form
 - c. time of filing/furnishing:
☐ contained in the international application as filed.
☐ filed together with the international application in computer readable form.
☐ furnished subsequently to this Authority for the purposes of search.
3. ☐ In addition, in the case that more than one version or copy of a sequence listing and/or table relating thereto has been filed or furnished, the required statements that the information in the subsequent or additional copies is identical to that in the application as filed or does not go beyond the application as filed, as appropriate, were furnished.
4. Additional comments:

**WRITTEN OPINION OF THE
INTERNATIONAL SEARCHING AUTHORITY**

International application No.
PCT/EP2005/000703

Box No. V Reasoned statement under Rule 43bis.1(a)(i) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement

1. Statement

Novelty (N)	Yes: Claims	1-30
	No: Claims	
Inventive step (IS)	Yes: Claims	
	No: Claims	1-30
Industrial applicability (IA)	Yes: Claims	1-30
	No: Claims	

2. Citations and explanations

see separate sheet

Re Item V.

1 Reference is made to the following documents:

D1 : US 6 511 348 B1 (WOJTACKI THOMAS ET AL) 28 January 2003 (2003-01-28)

D2 : US 2003/139091 A1 (KAMARAUSKAS MICHAEL R ET AL) 24 July 2003
(2003-07-24)

D3 : US 2003/087559 A1 (KORSUNSKY IOSIF R ET AL) 8 May 2003 (2003-05-08)

D4 : US 6 659 807 B1 (ZHENG QISHENG ET AL) 9 December 2003 (2003-12-09)

D5: US-B1-6 641 440 (HYLAND JAMES H ET AL) 4 November 2003 (2003-11-04)

2 INDEPENDENT CLAIM 1

2.1 The present application does not meet the criteria of Article 33(1) PCT, because the subject matter of claim 1 does not involve an inventive step in the sense of Article 33(3)PCT.

2.1.1 Document D1, which is considered to represent the most relevant state of the art to the subject matter of claim 1, discloses (the references in parentheses applying to this document) a modular electrical jack connector system comprising at least one jack connector housing (6) and at least one therein inserted jack connector-subassembly (4) wherein each jack connector housing (6) comprises a front coupling side having at last two openings (40, 42) which are disposed one above the other for the purpose of receiving a variety of electrical plug connectors through the front coupling side and an oppositely disposed with respect to the front coupling side rear side for the purpose of inserting at least one jack connector subassembly (4)

wherein each jack connector subassembly (4) comprises a longitudinal strip-like carrier (14) having a substantially right-angled profile and having on the top and on the bottom respectively a series of extrusion-coated or injection-molded jack terminals (28) which extrusion-coated or injection-molded jack terminals (28) embody at a front end of the strip-like carrier uncoated and bent-back cantilevered contact portions (28) which uncoated and bent-back cantilevered contact portions (28) are disposed aligned in an upper opening (40) and/or into a lower opening (42) of the jack connector housing (6).

2.1.2 The subject-matter of independent claim 1 differs from the disclosure of D1 in that the jack connector housing is formed for the purpose of modular adjacent stringing to at least one further jack connector housing.

2.1.3 The problem to be solved by the present invention may therefore be regarded as to provide efficient manufacture and assembly in jack connector systems.

2.1.4 In view of D2 the solution proposed in claim 1 of the present application cannot be considered as involving an inventive step (Article 33(3) PCT) for the following reasons:

Feature "jack connector housing is formed for the purpose of modular adjacent stringing to at least one further jack connector housing" is described in document D2 as providing the same advantages as in the present application (see paragraph 2).

2.1.5 Therefore the features disclosed in D1 and D2 would be combined by the skilled person, without exercise of any inventive skills in order to solve the problem posed. The proposed solution in independent claim 1 thus cannot be considered inventive (Article 33(3) PCT).

2.1.6 A similar reasoning could have been done departing from D3, D4 or D5.

3 DEPENDENT CLAIMS 2-30

Dependent claims 2-30 do not contain any features which, in combination with the features of any claim to which they refer, meet the requirements of the PCT in respect of inventive step (Article 33(3) PCT).

- 3.1 Features of claims 3, 10-15, 19, 20, 22, 23 are known from D1.
- 3.2 Features of claims 2, 8, 9, 25-29 are known from D2.
- 3.3 Features of claims 16-18 are known from D3.
- 3.4 Features of claims 4, 7, 30 are known from D4.

3.5 Features of claims 24 are known from D5.

3.6 The features of claims 5, 6, 21 are merely some of several straightforward possibilities from which the skilled person would select, in accordance with circumstances, without the exercise of inventive skill, in order to solve the problem posed.

4. INDUSTRIAL APPLICABILITY

The subject-matter of the application relates to a modular jack connector system, that obviously involves an industrial applicability.